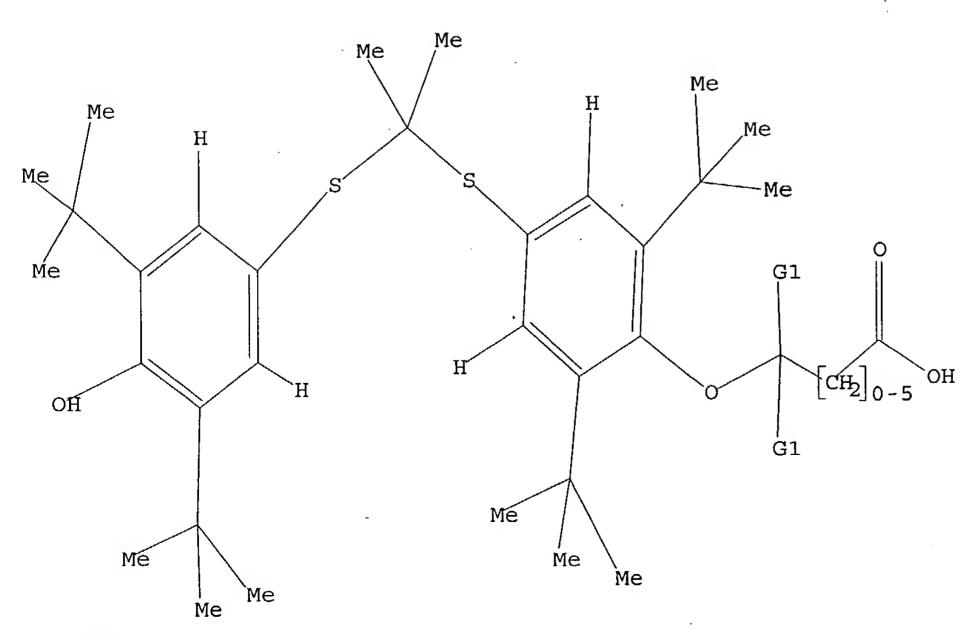
(FILE 'HOME' ENTERED AT 15:07:30 ON 20 SEP 2004)

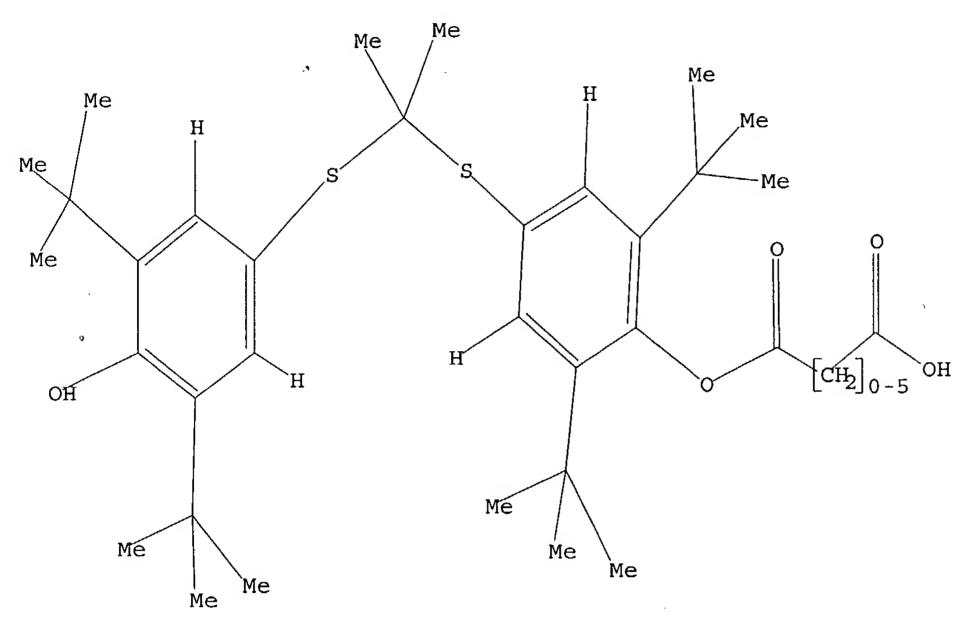
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L2
              0 S L1 SSS FULL
L3
                STRUCTURE UPLOADED
L4
              0 S L4 SSS
L5
              0 S L4 SSS FULL
L6
                STRUCTURE UPLOADED
L7
              0 S L7 SSS
L8
              0 S L7 SSS FULL
L9
                STRUCTURE UPLOADED
L10
              0 S L10 SSS
L11
              0 S L10 SSS FULL
L12
L13
                STRUCTURE UPLOADED
              0 S L13 SSS
L14
              0 S L13 SSS FULL
L15
     FILE 'REGISTRY' ENTERED AT 15:23:31 ON 20 SEP 2004
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L17
             12 S L16 SSS FULL
L18
                STRUCTURE UPLOADED
L19
              3 S L19 SSS
L20
             34 S L19 SSS FULL
L21
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L22
              6 S L18
             24 S L21
L23
             24 S L22 OR L23
L24
=> d 116
L16 HAS NO ANSWERS
L16
                 STR
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G1 H,Ak

Structure attributes must be viewed using STN Express query preparation.

=> d l19 L19 HAS NO ANSWERS L19 STR



G1 H,Ak

Structure attributes must be viewed using STN Express query preparation.

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=> d 124 bib abs hitstr 1-24
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ANSWER 1 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN
L24
     2004:610066 CAPLUS
AN
     141:156929
DN
     Process of preparing esters and ethers of probucol and derivatives thereof
TI
     Weingarten, M. David; Sikorski, James A.
IN
     Atherogenics, Inc., USA
PA
     PCT Int. Appl., 136 pp.
SO
     CODEN: PIXXD2
DT
     Patent
     English
LA
FAN.CNT 1
                                            APPLICATION NO.
                                                                    DATE
     PATENT NO.
                      KIND
                                DATE
                          A2
                                20040729
                                            WO 2004-US805
     WO 2004062622
```

PI WO 2004062622 A2 20040729 WO 2004-US805 20040113

W: AE, AE, AG, AL, AL, AM, AM, AM, AT, AT, AU, AU, AZ, AZ, BA, BB, BG, BG, BR, BR, BW, BY, BY, BZ, BZ, CA, CH, CN, CN, CO, CO, CR, CR, CU, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EC, EE, EE, EG, ES, ES, FI, FI, GB, GD, GE, GE, GH, GH, GH, GM, HR, HR, HU, HU, ID, IL, IN, IS, JP, JP, KE, KE, KG, KG, KP, KP, KP, KR, KZ, KZ, KZ, LC, LK, LR, LS, LS, LT, LU, LV, MA, MD, MD, MG, MK, MN, MW, MX, MX, MZ

PRAI US 2003-439665P P 20030113

GI

a

give

Probucol or a probucol derivative can be efficiently converted to a monoester or monoether of probucol (I) [wherein R1-R4 = H, (un)substituted alkyl; R5, R6 = each (un)substituted alkyl, alkenyl, or aryl; or R5 and R6 can come together to form a carbocyclic ring; X, Y = H, optionally substituted (un)saturated acyl having from 1 to 18 carbon atoms each optionally containing

polar or charged functionality] by reacting the free hydroxyl-containing probucol or a derivative thereof (by which is meant a probucol compound with at least one substituent that is different from that on the parent probucol mol. but which maintains the two free hydroxyl groups), i.e., I (X = Y = H; R1-R6 = same as above), with a Grignard reagent or a lithium reagent that produces a magnesium bromide or lithium salt of probucol or the probucol derivative. The probucol compound anion is then reacted with an ester or ether forming compound. Thus, in a dry 25 mL 3-neck round bottom flask fitted with a reflux condenser, nitrogen inlet, thermocouple and stir bar was charged probucol (0.25 g, 0.48 mmol) followed by 2.5 mL anhydrous toluene and then isopropylmagnesium chloride (0.51 mL, 2.0 M in THF) in 1 portion. The reaction was brought to room temperature and then succinic anhydride (0.25 g, 2.5 mmol) was added in 1 portion. After aging for 45 min, the reaction was slowly quenched with 1 N HCl and diluted with EtOAc. The biphasic reaction was then cooled to room temperature and the phases were separated to

an organic layer containing 60% probucol monosuccinate, 13% probucol disuccinate,

and 27% probucol according to HPLC anal.

IT 216167-82-7P, Probucol monosuccinate 216167-92-9P 216167-95-2P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of esters and ethers of probucol and its derivs. by treatment of probucol and its derivs. with Grignard reagent or organolithium reagent and then ester or ether forming compound)

RN 216167-82-7 CAPLUS

CN Butanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl]ester (9CI) (CA INDEX NAME)

RN 216167-92-9 CAPLUS

CN Acetic acid, [4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]- (9CI) (CA INDEX NAME)

$$t-Bu$$
 $Bu-t$
 HO
 $S-C-S$
 Me
 $O-CH_2-CO_2H$
 $t-Bu$

RN 216167-95-2 CAPLUS

CN Butanoic acid, 4-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]- (9CI) (CA INDEX NAME)

L24 ANSWER 2 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2004:181454 CAPLUS

DN 140:332096

TI Selective inhibition of endothelial and monocyte redox-sensitive genes by AGI-1067: A novel antioxidant and antiinflammatory agent

AU Kunsch, Charles; Luchoomun, Jayraz; Grey, Janice Y.; Olliff, Lynda K.; Saint, Leigh B.; Arrendale, Richard F.; Wasserman, Martin A.; Saxena, Uday; Medford, Russell M.

CS Department of Discovery Research, AtheroGenics, Inc., Alpharetta, GA, USA

SO Journal of Pharmacology and Experimental Therapeutics (2004), 308(3), 820-829

CODEN: JPETAB; ISSN: 0022-3565

PB American Society for Pharmacology and Experimental Therapeutics

DT Journal

AB

LA English

Atherosclerosis is a disease of oxidative stress and inflammation. AGI-1067 [butanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-, hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester] is a metabolically stable derivative of, yet pharmacol. distinct from, the antioxidant drug probucol. It is a member of a novel class of orally active, antioxidant, anti-inflammatory compds. termed vascular protectants and exhibits antiatherosclerotic properties in multiple animal models and in humans. To elucidate its antiatherosclerotic mechanisms, we have evaluated several cellular and mol. properties of AGI-1067 in vitro. AGI-1067 exhibited potent lipid peroxide antioxidant activity comparable with probucol yet demonstrated significantly enhanced cellular uptake over that observed with probucol. AGI-1067, but not probucol, inhibited basal levels of reactive oxygen species (ROS) in cultured primary human endothelial cells and both basal and hydrogen peroxide-induced levels of ROS in the promonocytic cell line, U937. Furthermore, AGI-1067 inhibited the inducible expression of the redox-sensitive genes, vascular cell adhesion mol.-1 (VCAM-1) and monocyte chemoattractant protein-1, in endothelial cells as well as tumor necrosis factor- α (TNF- α), interleukin (IL)-1 β , and IL-6 production in peripheral blood mononuclear cells, whereas probucol had no effect. CDNA array hybridization expts. demonstrated that AGI-1067 selectively inhibited the expression of only a subset of TNF- α -responsive and nuclear factor- κB $(NF-\kappa B)$ -inducible genes in endothelial cells. The inhibitory effect of AGI-1067 on inducible VCAM-1 gene expression occurred at the

transcriptional level, yet AGI-1067 had no effect on the activation of the redox-sensitive transcription factor NF-κB. These studies suggest that the anti-inflammatory and antiatherosclerotic properties of AGI-1067 may be due to selective inhibition of redox-sensitive endothelial and monocyte inflammatory gene expression. These studies provide a mol. basis for understanding the mechanism of action of this new class of therapeutic antiatherosclerotic compds.

216167-82-7, AGI-1067 IT

> RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(selective inhibition of endothelial and monocyte redox-sensitive genes by an antiinflammatory and antioxidant agent, AGI-1067)

216167-82-7 CAPLUS RN

Butanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-CN hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)

$$t-Bu$$
 $S-C-S$
 Me
 $t-Bu$
 $Bu-t$
 $O-C-CH_2-CH_2-CO_2H$
 $t-Bu$

RE.CNT THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 3 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN

AN2004:60447 CAPLUS

DN140:105287

Preparation of meglumine salts of poorly soluble probucol esters and TIethers for treatment of inflammatory disorders

Meng, Charles Q. IN

Atherogenics, Inc., USA PA

PCT Int. Appl., 83 pp. SO

CODEN: PIXXD2

DTPatent

LA English

FAN.	CNT																	
	PA	rent :	NO.			KIN					APPL	ICAT	ION 1	NO.		D	ATE	
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ΡI	WO	2004	0074	23		A1 20040122			WO 2003-US21781				20030714					
		W:	AE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	LK,	LR,
			LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	NZ,	OM,
			PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	TJ,	TM,	TN,
			TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW,	AM,	AZ,	BY,
			KG,	KZ,	MD,	RU												
		RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AT,	BE,	BG,
			CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,	IT,	LU,	MC,
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AB of		ganic								ers a	and o	ethe	rs, (espe	cial	ly me	eglu	nine
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compds. such as 4-[4-[[1-[[3,5-bis-bis(1,1-dimethylethyl)-4hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1dimethylethyl)phenoxy]butanoic acid (I), are for the treatment of inflammatory disorders, e.g., arthritis, asthma, multiple sclerosis, psoriasis, etc. Thus, a probucol ester salt was prepared by the treatment of I with meglumine in in THF solution Th effectiveness of the compound in the treatment of inflammatory disorders was demonstrated.

IT 646518-18-5P 646518-19-6P

RL: PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of meglumine salts of poorly soluble probucol esters and ethers for treatment of inflammatory disorders)

RN 646518-18-5 CAPLUS

CN D-Glucitol, 1-deoxy-1-(methylamino)-, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl butanedioate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 216167-82-7 CMF C35 H52 O5 S2

CM 2

CRN 6284-40-8 CMF C7 H17 N O5

Absolute stereochemistry.

RN 646518-19-6 CAPLUS

CN D-Glucitol, 1-deoxy-1-(methylamino)-, [4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]acetate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 216167-92-9 CMF C33 H50 O4 S2

CM 2

CRN 6284-40-8 CMF C7 H17 N O5

Absolute stereochemistry.

IT 646518-20-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of meglumine salts of poorly soluble probucol esters and ethers for treatment of inflammatory disorders)

RN 646518-20-9 CAPLUS

CN D-Glucitol, 1-deoxy-1-(methylamino)-, 4-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]butanoate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 216167-95-2 CMF C35 H54 O4 S2

$$t-Bu$$
 $S-C-S$
 Me
 $t-Bu$
 $Bu-t$
 $O-(CH_2)_3-CO_2H$
 $t-Bu$

CM 2

CRN 6284-40-8 CMF C7 H17 N O5

Absolute stereochemistry.

IT 216167-82-7 216167-92-9 216167-95-2

RL: PRP (Properties); RCT (Reactant); RACT (Reactant or reagent)
(preparation of meglumine salts of poorly soluble probucol esters and ethers
for treatment of inflammatory disorders)

RN 216167-82-7 CAPLUS

CN Butanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-

hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl]ester (9CI) (CA INDEX NAME)

$$t-Bu$$
 $S-C-S$
 Me
 $S-C-S$
 O
 O
 $C-CH_2-CH_2-CO_2H$
 $t-Bu$

RN 216167-92-9 CAPLUS

CN Acetic acid, [4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]- (9CI) (CA INDEX NAME)

$$t-Bu$$
 $S-C-S$
 Me
 $Bu-t$
 $O-CH_2-CO_2H$
 $t-Bu$
 $t-Bu$

RN 216167-95-2 CAPLUS

CN Butanoic acid, 4-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]- (9CI) (CA INDEX NAME)

$$t-Bu$$
 $S-C-S$
 Me
 $O-(CH_2)_3-CO_2H$
 $t-Bu$
 $t-Bu$

IT 646518-21-0P 646518-22-1P 646518-23-2P

646518-25-4P 646518-27-6P 646518-28-7P

646518-30-1P 646518-32-3P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of meglumine salts of poorly soluble probucol esters and ethers for treatment of inflammatory disorders)

RN 646518-21-0 CAPLUS

CN D-Glucitol, 1-deoxy-1-(methylamino)-, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl propanedioate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 524005-22-9 CMF C34 H50 O5 S2

$$t-Bu$$
 $S-C-S$
 Me
 $O-C-CH_2-CO_2H$
 $t-Bu$

CM 2

CRN 6284-40-8 CMF C7 H17 N O5

Absolute stereochemistry.

RN 646518-22-1 CAPLUS

CN D-Glucitol, 1-deoxy-1-(methylamino)-, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl pentanedioate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 216167-94-1 CMF C36 H54 O5 S2

$$t-Bu$$
 $S-C-S$
 O
 O
 $C-C$
 $CH_2)_3-CO_2H$
 $t-Bu$

CM 2

CRN 6284-40-8 CMF C7 H17 N O5

Absolute stereochemistry.

RN 646518-23-2 CAPLUS

CN D-Glucitol, 1-deoxy-1-(methylamino)-, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl

hexanedioate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 219773-26-9 CMF C37 H56 O5 S2

CM 2

CRN 6284-40-8 CMF C7 H17 N O5

Absolute stereochemistry.

RN 646518-25-4 CAPLUS

CN D-Glucitol, 1-deoxy-1-(methylamino)-, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl heptanedioate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 646518-24-3 CMF C38 H58 O5 S2

$$t-Bu$$
 $S-C-S$
 O
 O
 C
 $CH_2)_5-CO_2H$
 $t-Bu$

CM 2

CRN 6284-40-8 CMF C7 H17 N O5

Absolute stereochemistry.

RN 646518-27-6 CAPLUS

CN D-Glucitol, 1-deoxy-1-(methylamino)-, 3-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]propanoate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 646518-26-5 CMF C34 H52 O4 S2

$$t-Bu$$
 $S-C-S$
 Me
 $O-CH_2-CH_2-CO_2H$
 $t-Bu$

CM 2

CRN 6284-40-8 CMF C7 H17 N O5

Absolute stereochemistry.

RN 646518-28-7 CAPLUS

CN D-Glucitol, 1-deoxy-1-(methylamino)-, 5-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]pentanoate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 216168-44-4 CMF C36 H56 O4 S2

$$t-Bu$$
 $S-C-S$
 Me
 $O-(CH2)4-CO2H
 $t-Bu$$

CM 2

CRN 6284-40-8 CMF C7 H17 N O5

Absolute stereochemistry.

RN 646518-30-1 CAPLUS

CN D-Glucitol, 1-deoxy-1-(methylamino)-, 6-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]hexanoate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 646518-29-8 CMF C37 H58 O4 S2

$$t-Bu$$
 $S-C-S$
 Me
 $O-(CH_2)_5-CO_2H$
 $t-Bu$

CM 2

CRN 6284-40-8 CMF C7 H17 N O5

Absolute stereochemistry.

RN 646518-32-3 CAPLUS

CN D-Glucitol, 1-deoxy-1-(methylamino)-, 7-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]heptanoate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 646518-31-2 CMF C38 H60 O4 S2

$$S-C-S$$
 $Bu-t$
 $S-C-S$
 $O-(CH_2)_6-CO_2H$
 $t-Bu$

CM 2

6284-40-8 CRN C7 H17 N O5 CMF

Absolute stereochemistry.

216167-94-1 216168-44-4 219773-26-9 IT

524005-22-9 646518-24-3 646518-26-5

646518-29-8 646518-31-2

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(preparation of meglumine salts of poorly soluble probucol esters and ethers

for treatment of inflammatory disorders)

216167-94-1 CAPLUS RN

Pentanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-CN

hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl]

ester (9CI) (CA INDEX NAME)

$$t-Bu$$
 $S-C-S$
 0
 $C-C-C$
 $CH_2)_3-CO_2H$
 $t-Bu$

216168-44-4 CAPLUS RN

Pentanoic acid, 5-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-CN

hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]-(CA INDEX NAME) (9CI)

$$t-Bu$$
 $S-C-S$
 Me
 $O-(CH_2)_4-CO_2H$
 $t-Bu$

219773-26-9 CAPLUS RN

Hexanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-CN hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl]

$$t-Bu$$
 $S-C-S$
 $Bu-t$
 $O-C-(CH_2)_4-CO_2H$
 $t-Bu$

RN 524005-22-9 CAPLUS

CN Propanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)

RN 646518-24-3 CAPLUS

CN Heptanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)

RN 646518-26-5 CAPLUS

CN Propanoic acid, 3-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]-(9CI) (CA INDEX NAME)

$$t-Bu$$
 $S-C-S$
 Me
 $O-CH_2-CH_2-CO_2H$
 $t-Bu$

RN 646518-29-8 CAPLUS

CN Hexanoic acid, 6-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]- (9CI) (CA INDEX NAME)

RN 646518-31-2 CAPLUS

CN Heptanoic acid, 7-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy](9CI) (CA INDEX NAME)

$$t-Bu$$
 $S-C-S$
 Me
 $S-C-S$
 $O-(CH_2)_6-CO_2H$
 $t-Bu$

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 4 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2003:904519 CAPLUS

DN 140:331520

TI Pharmacologic prevention of both restenosis and atherosclerosis progression: AGI-1067, probucol, statins, folic acid, and other therapies

AU Tardif, Jean-Claude; Gregoire, Jean; Lavoie, Marc-Andre; L'Allier, Philippe L.

CS Department of Medicine, Montreal Heart Institute, Montreal, Can.

SO Current Opinion in Lipidology (2003), 14(6), 615-620 CODEN: COPLEU; ISSN: 0957-9672

PB Lippincott Williams & Wilkins

DT Journal; General Review

LA English

AB

In this article, the authors intend to provide an update on A review. clin. trials of pharmacol. prevention of restenosis after percutaneous coronary interventions, placed in the perspective of the use of orally administered therapy for the prevention of atherosclerosis progression and clin. events. AGI-1067, the mono-succinic acid ester of probucol, is a phenolic antioxidant member of a novel class of agents termed v-protectants. It has strong antioxidant properties equipotent to those of probucol and antiinflammatory properties. It inhibits gene expression of VCAM-1 and MCP-1 and was effective at preventing atherosclerosis in all tested animal models including the non-human primate. In the Canadian Antioxidant Restenosis Trial (CART) 1, AGI-1067 and probucol improved lumen dimensions at the site of percutaneous coronary intervention. AGI-1067 also improved luminal dimensions of non-intervened coronary reference segments in the Canadian Antioxidant Restenosis Trial, which suggests a direct antiatherosclerosis effect. Probucol reduced post-percutaneous coronary intervention restenosis and progression of carotid atherosclerosis in other clin. trials. Although statins reduce atherosclerotic events, they do not appear to have a significant effect on restenosis. The failure of folate therapy to protect against restenosis in the Folate After Coronary Intervention Trial (FACIT) occurred despite significant redns. in Hcy levels. Prevention of both post-percutaneous coronary intervention restenosis and atherosclerosis progression with a pharmacol. agent such as AGI-1067 may be an attractive treatment paradigm. Two important trials that test the antioxidant/antiinflammatory hypothesis

are ongoing with AGI-1067: the Canadian Atherosclerosis and Restenosis Trial 2, which assesses its value for the reduction of both atherosclerosis progression and post-percutaneous coronary interventions restenosis, and the Aggressive Reduction of Inflammation Stops Events (ARISE) trial which is evaluating its effects on cardiovascular events.

IT **216167-82-7**, AGI-1067

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (prevention of both restenosis and atherosclerosis progression)

RN 216167-82-7 CAPLUS

CN Butanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)

$$t-Bu$$
 $S-C-S$
 Me
 $O-C-CH_2-CH_2-CO_2H$
 $t-Bu$
 $t-Bu$

RE.CNT 62 THERE ARE 62 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 5 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2003:845461 CAPLUS

DN 140:192654

TI Experimental and clinical studies show that the probucol derivative AGI-1067 prevents vascular growth

AU Doggrell, Sheila A.

CS Doggrell Biomedical Communications, Auckland, Lynfield, N. Z.

SO Expert Opinion on Investigational Drugs (2003), 12(11), 1855-1859 CODEN: EOIDER; ISSN: 1354-3784

PB Ashley Publications Ltd.

DT Journal

LA English

AGI-1067 is a derivative of probucol that is a promising new development for ABthe treatment of restenosis and possibly atherosclerosis. In monkeys fed a high-fat diet for 1 yr, AGI-1067 prevented the development of atherosclerosis. In these monkeys, AGI-1067 lowered plasma levels of low-d. lipoprotein (LDL)-cholesterol and, in contrast to probucol, was capable of increasing high-d. lipoprotein (HDL)-cholesterol levels. Although AGI1067 did not have marked lipid-lowering effects in two transgenic mouse models (the LDL-receptor-deficient and apolipoprotein-E-deficient models) fed a high-fat chow, it decreased the atherosclerotic lesion area in the aorta. In a mouse model of acute inflammation, the mRNA for the pro-inflammatory vascular cell adhesion mol.-1 and monocyte chemoattractant protein-1 was upregulated and this was inhibited by AGI-1067. AGI-1067 inhibited the TNF- α induction of redox-sensitive inflammatory proteins, vascular cell adhesion mol.-1, monocyte chemoattractant protein-1 and E-selectin, in cell culture. In addition, AGI-1067 is an antioxidant. In the Canadian Antioxidant Restenosis Trial (CART-1) of AGI-1067 in percutaneous coronary interventions, AGI-1067 had no effect on LDL-cholesterol but lowered HDL-cholesterol. At 6 mo follow up, the lumen area of the percutaneous coronary interventions segments was greater in patients treated with AGI1067 than in untreated patients. Restenosis rates were 37.5% in the placebo group and 26% in the AGI-1067 group. The lumen area of reference segments was reduced in the placebo group but increased with the higher doses of AGI1067. Unlike probucol, AGI-1067 did not alter QTc interval.

IT **216167-82-7**, AGI-1067

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL

(Biological study); USES (Uses)

(exptl. and clin. studies show that the probucol derivative AGI-1067 prevents vascular growth)

RN 216167-82-7 CAPLUS

CN Butanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl]ester (9CI) (CA INDEX NAME)

$$t-Bu$$
 $S-C-S$
 Me
 $O-C-CH_2-CH_2-CO_2H$
 $t-Bu$

RE.CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 6 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2003:803403 CAPLUS

DN 139:332164

TI Vascular protectants for the treatment of atherosclerosis

AU Tardif, Jean-Claude; Gregoire, Jean; Lavoie, Marc-Andre; L'Allier, Philippe L.

CS Clin. Res., Montreal Heart Inst., Montreal, QC, H1T 1C8, Can.

SO Expert Review of Cardiovascular Therapy (2003), 1(3), 385-392 CODEN: ERCTAS; ISSN: 1477-9072

PB Future Drugs Ltd.

DT Journal; General Review

LA English

A review. AGI-1067, the monosuccinic acid ester of probucol, is a ABphenolic antioxidant member of a novel class of agents termed vascular protectants. It has strong antioxidant properties, equipotent to those of probucol, and anti-inflammatory properties. It inhibits gene expression of vascular cell adhesion mol.-1 and monocyte chemotactic protein-1 and has been effective at preventing atherosclerosis in all tested animal models. It also improved luminal dimensions of reference segments in the percutaneous coronary intervention (PCI) vessels in the CART-1 clin. trial, which suggests a direct anti-atherosclerosis effect. Two important trials that test the antioxidant/anti-inflammatory hypothesis are ongoing with AGI-1067: the Canadian Atherosclerosis and Restenosis Trial, which assesses its value for the reduction of both atherosclerosis progression in non-PCI vessels and post-PCI restenosis, and the Aggressive Reduction of Inflammation Stops Events trial, which is evaluating the effects of AGI-1067 on hard cardiovascular outcomes.

IT **216167-82-7**, AGI-1067

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(efficacy of vascular protectant AGI-1067 for treatment of atherosclerosis)

RN 216167-82-7 CAPLUS

CN Butanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)

RE.CNT 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 7 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2003:777753 CAPLUS

DN 139:276712

TI Preparation of probucol derivatives for treatment of hyperlipidemia, inflammatory disorders, etc.

IN Del Soldato, Piero; Santus, Giancarlo; Ongini, Ennio

PA Nicox S.A., Fr.

SO PCT Int. Appl., 37 pp.

CODEN: PIXXD2

DT Patent

LA English

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			CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,	IT,	LU,	MC,
			NL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,
			GW,	ML,	MR,	NE,	SN,	TD,	TG									
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OS MARPAT 139:276712

GΙ

$$t-Bu$$

Me

 $s-C-S$
 $t-Bu$
 $t-Bu$

Bu-t

 $t-Bu$

Bu-t

 $t-Bu$

The title compds. I [X, X1 = H, (T)nYNO2; X and X1 cannot be both H; n=0 or 1; when n=1, T=CO; Y= bivalent radical (further details on this bivalent radical are given)], useful in the treatment of hyperlipidemia, inflammatory disorders (no data), etc., are prepared

IT 607393-84-0P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of probucol derivs. for treatment of hyperlipidemia and inflammatory disorders)

RN 607393-84-0 CAPLUS

CN Butanoic acid, 4-(nitrooxy)-, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl ester (9CI) (CA INDEX NAME)

L24 ANSWER 8 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2003:704642 CAPLUS

DN 139:285453

TI AGI-1067: Treatment of atherosclerosis VCAM-1 and MCP-1 expression inhibitor antioxidant

AU Sorbera, L. A.; Castaner, J.

CS Prous Science, Barcelona, 08080, Spain

SO Drugs of the Future (2003), 28(5), 421-424 CODEN: DRFUD4; ISSN: 0377-8282

PB Prous Science

DT Journal; General Review

LA English

AB A review. AGI-1067 is a monosuccinate ester of probucol that exhibited marked lipid-lowering and antioxidant activity. AGI-1067 potently inhibited VCAM-1 and MCP-1 expression and smooth muscle cell proliferation and was effective in animal models of atherosclerosis and hyperlipidemia. The agent has shown efficacy in the prevention of atherosclerosis in patients with coronary artery disease and in preventing restenosis in patients undergoing percutaneous coronary interventions. AG-1067 is currently undergoing phase III trials with an indication for secondary prevention of atherosclerotic cardiovascular disease.

IT 216167-82-7, AGI-1067

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(VCAM-1 and MCP-1 expression inhibitor and antioxidant AGI-1067 for treatment of atherosclerosis)

RN 216167-82-7 CAPLUS

CN Butanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)

$$t-Bu$$
 $S-C-S$
 O
 O
 $C-CH_2-CH_2-CO_2H$
 $t-Bu$

RE.CNT 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 9 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2003:420448 CAPLUS

DN 139:224371

TI AGI-1067: A multifunctional phenolic antioxidant, lipid modulator, anti-inflammatory and antiatherosclerotic agent

AU Sundell, Cynthia L.; Somers, Patricia K.; Meng, Charles Q.; Hoong, Lee K.; Suen, Ki-Ling; Hill, Russell R.; Landers, Laura K.; Chapman, Angela; Butteiger, Dustie; Jones, Moira; Edwards, David; Daugherty, Alan; Wasserman, Martin A.; Alexander, R. Wayne; Medford, Russell M.; Saxena, Uday

CS AtheroGenics, Inc., Alpharetta, GA, USA

Journal of Pharmacology and Experimental Therapeutics (2003), 305(3), 1116-1123

CODEN: JPETAB; ISSN: 0022-3565

PB American Society for Pharmacology and Experimental Therapeutics

DT Journal

LA English

To explore the therapeutic efficacy and potential mechanisms of action of AB a new class of antiatherosclerotic drugs, AGI-1067 [mono[4-[[1-[[3,5bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1- methylethyl]thio]-2,6bis(1,1-dimethylethyl)phenyl] ester] (butanedioic acid) was tested in several animal models of atherosclerosis. AGI-1067, a novel phenolic antioxidant, was well tolerated in a 1-yr study in hypercholesterolemic cynomolgus monkeys. It lowered low-d. lipoprotein cholesterol (LDLc) by 41 and 90% at oral doses of 50 and 150 mg/kg, resp. and increased high-d. lipoprotein cholesterol (HDLc) by 107% at the higher dose. In contrast, another phenolic antioxidant, probucol, had a modest LDLc-lowering effect (15% at 250 mg/kg) while decreasing HDLc (37% at 150 mg/kg). Histopathol. of the aortas and coronary arteries revealed no atherosclerosis in the AGI-1067 (150 mg/kg) group and minimal-to-moderate atherosclerosis in the vehicle and probucol (150 mg/kg) groups. AGI-1067 also inhibited atherosclerosis in LDL receptor-deficient (LDLr -/-) mice and apolipoprotein E-deficient (ApoE -/-) mice even in the absence of a lipid-lowering effect. In LDLr -/- mice, AGI-1067 reduced aortic atherosclerosis by 49%. In ApoE -/- mice, AGI-1067 reduced atherosclerosis by 25, 41, and 49% in the arch, thoracic, and abdominal regions of the aorta. AGI-1067 also reduced vascular cell adhesion mol.-1 (VCAM-1) and monocyte chemoattractant protein-1 (MCP-1) mRNA levels in lungs of lipopolysaccharide-stimulated mice. At the cellular level, AGI-1067 inhibited tumor necrosis factor- α -inducible expression of VCAM-1, MCP-1, and E-selectin in human aortic endothelial cells (IC50 values = 6, 10, and 25 μ M, resp.). These data show that AGI-1067 can inhibit atherosclerosis not only via its lipid-lowering effects but also by having direct anti-inflammatory effects on the vessel wall and suggest that it may be a novel therapeutic agent for coronary artery disease.

216167-82-7, AGI-1067
RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(AGI-1067 as a multifunctional phenolic antioxidant, lipid modulator, anti-inflammatory and antiatherosclerotic agent)

RN 216167-82-7 CAPLUS

IT

CN Butanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)

RE.CNT 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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2003:376540
                  CAPLUS
AN
     138:362685
DN
     Methods of reversing and preventing cardiovascular pathologies
TI
     Glass, Mitchell; Tardif, Jean-Claude
IN
PA
     Atherogenics, Inc., USA
     PCT Int. Appl., 64 pp.
SO
     CODEN: PIXXD2
     Patent
DT
     English
LA
FAN. CNT 1
                                                                     DATE
                                             APPLICATION NO.
     PATENT NO.
                          KIND
                                 DATE
                          -- --
                           A2
                                 20030515
                                             WO 2002-US37274
                                                                      20021112
     WO 2003039352
PI
                           A3
                                 20031023
     WO 2003039352
             AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD,
             RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
             CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
             PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
             NE, SN, TD, TG
                                             US 2002-293399
                                                                      20021112
                                 20030925
     US 2003181520
                           A1
                                                                      20021112
                                 20040901
                                             EP 2002-789782
                           A2
     EP 1451138
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK
                                 20011109
PRAI US 2001-347778P
                           P
                                 20021112
     WO 2002-US37274
                           W
     MARPAT 138:362685
OS
GI
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The present invention is a method to increase the lumen diameter of a AB coronary blood vessel, that includes administering a lumen increasing amount of a compound of the formula I wherein x is defined as an integer between 1 and 4; or a pharmaceutically acceptable salt, ester or prodrug thereof. 216167-82-7P

RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(methods of reversing and preventing cardiovascular pathol. associated with decrease in lumen diameter of coronary blood vessel in combination with other agents without prolongation of the heart QTc interval)

Ι

216167-82-7 CAPLUS RN

IT

Butanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-CNhydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] (CA INDEX NAME) ester (9CI)

$$t-Bu$$
 $S-C-S$
 Me
 $O-C-CH_2-CH_2-CO_2H$
 $t-Bu$

IT 216167-94-1 219773-26-9 524005-22-9

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(methods of reversing and preventing cardiovascular pathol. associated with decrease in lumen diameter of coronary blood vessel in combination with other agents without prolongation of the heart QTc interval)

RN 216167-94-1 CAPLUS

Pentanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl]
ester (9CI) (CA INDEX NAME)

$$t-Bu$$
 $S-C-S$
 Me
 $O-C-(CH2)3-CO2H
 $t-Bu$$

RN 219773-26-9 CAPLUS

CN Hexanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)

$$t-Bu$$
 $S-C-S$
 O
 O
 C
 $CH_2)_4-CO_2H$
 $t-Bu$

RN 524005-22-9 CAPLUS

CN Propanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)

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AN
     2003:376511
                  CAPLUS
DN
     138:362670
     Probucol-related compounds and methods for treating transplant rejection
TI
     Glass, Mitchell; Edwards, David B.
IN
     Atherogenics, Inc., USA
PA
     PCT Int. Appl., 87 pp.
SO
     CODEN: PIXXD2
DT
     Patent
     English
LA
FAN.CNT 1
                                                                     DATE
                         KIND
                                             APPLICATION NO.
     PATENT NO.
                                DATE
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                                             WO 2002-US34187
                                                                     20021025
PI
     WO 2003039231
                          A2
                                 20030515
     WO 2003039231
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                                 20031016
             AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD,
             RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
             CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
             PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
             NE, SN, TD, TG
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                                 20030814
                                             US 2002-281027
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     US 2003153536
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                                 20040818
                                             EP 2002-802807
                                                                     20021025
     EP 1446113
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK
                          P
                                 20011025
PRAI US 2001-339535P
     WO 2002-US34187
                          W
                                 20021025
     MARPAT 138:362670
OS
     The invention discloses the use of probucol-related compds. (Markush
     included), and pharmaceutically acceptable salts thereof, alone or in
     combination, for the treatment of transplant rejection.
     216167-82-7 216167-92-9 216167-94-1
IT
     216167-95-2
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (probucol-related compds. for treating transplant rejection)
     216167-82-7 CAPLUS
RN
     Butanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-
CN
     hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl]
     ester (9CI)
                 (CA INDEX NAME)
                Me
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$$t-Bu$$
 $S-C-S$
 Me
 $t-Bu$
 $Bu-t$
 $O-C-CH_2-CH_2-CO_2H$
 $t-Bu$

RN 216167-92-9 CAPLUS

CN Acetic acid, [4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]- (9CI) (CA INDEX NAME)

RN 216167-94-1 CAPLUS

Pentanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl]
ester (9CI) (CA INDEX NAME)

RN 216167-95-2 CAPLUS

CN Butanoic acid, 4-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]- (9CI) (CA INDEX NAME)

L24 ANSWER 12 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2003:201721 CAPLUS

DN 139:269969

TI Clinical results with AGI-1067: a novel antioxidant vascular protectant

AU Tardif, Jean-Claude

CS Department of Medicine, Montreal Heart Institute, Montreal, QC, H1T 1C8, Can.

SO American Journal of Cardiology (2003), 91(3A), 41A-49A CODEN: AJCDAG; ISSN: 0002-9149

PB Excerpta Medica, Inc.

DT Journal; General Review

LA English

AB A review. A large body of evidence points to oxidative stress as an important trigger in the complex chain of events leading to atherosclerosis. Reactive O species have also been implicated in the pathophysiol. of restenosis after percutaneous coronary interventions (PCI). The powerful antioxidant probucol has been shown to prevent coronary restenosis after balloon angioplasty in the MultiVitamins and Probucol (MVP) trial and other clin. studies. Probucol has also induced regression of carotid atherosclerosis in the Fukuoka Atherosclerosis Trial (FAST). However, prolongation of the QT interval with probucol remains a long-term safety concern. AGI-1067, a metabolically stable analog of probucol, is a vascular protectant (V-protectant) with strong antioxidant properties, equipotent to those of probucol. This V-protectant has been

effective in preventing atherosclerosis in all animal models tested, including low-d.-lipoprotein receptor-deficient and apolipoprotein E-knockout mice and hypercholesterolemic primates. AGI-1067 improved luminal dimensions of the percutaneous coronary intervention site (PCI) and reduced restenosis in the Canadian Antioxidant Restenosis Trial (CART-1). In contrast to probucol, AGI-1067 did not induce prolongation of the QT interval. AGI-1067 also improved luminal dimensions of the reference segments in the PCI vessels in CART-1, an effect that suggests a direct antiatherosclerosis effect. This has potentially important implications, as local approaches to prevent restenosis, such as coated stents, are not expected to prevent atherosclerosis progression, myocardial infarction, and cardiovascular death. Considering that oxidative stress and inflammation may persist for a prolonged period after stenting, treatment with AGI-1067 for the entire period of risk after PCI (instead of only 4 wk in CART-1) may result in enhanced protection against luminal renarrowing in the ongoing multicenter CART-2 trial. Because the ultimate goal of therapy for patients with coronary artery disease must remain prevention of disease progression and atherosclerosis-related events, CART-2 will test the value of AGI-1067 for the reduction of both post-PCI restenosis and atherosclerosis progression.

IT **216167-82-7**, AGI 1067

RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (clin. results with AGI-1067, a novel antioxidant cardiovascular protectant)

RN 216167-82-7 CAPLUS

CN Butanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)

$$t-Bu$$
 $S-C-S$
 O
 O
 $C-CH_2-CH_2-CO_2H$
 $t-Bu$

RE.CNT 73 THERE ARE 73 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 13 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2003:201720 CAPLUS

DN 139:254552

TI Chemistry and pharmacology of vascular protectants: A novel approach to the treatment of atherosclerosis and coronary artery disease

AU Wasserman, Martin A.; Sundell, Cynthia L.; Kunsch, Charles; Edwards, David; Meng, Charles Q.; Medford, Russell M.

CS Department of Discovery Research, AtheroGenics, Inc., Alpharetta, GA, 30004, USA

SO American Journal of Cardiology (2003), 91(3A), 34A-40A CODEN: AJCDAG; ISSN: 0002-9149

PB Excerpta Medica, Inc.

DT Journal; General Review

LA English

This review addresses the role of oxidative stress in the pathol. of atherosclerosis and why it is now believed that atherosclerosis is not only a disease of oxidative stress but also of chronic inflammation. Perhaps more importantly, this review also describes the vascular protectant (V-protectant) technol. platform originated at AtheroGenics, Inc., from which a series of inhibitory compds. has emerged to treat a number of chronic inflammatory diseases, including atherosclerosis. In

atherosclerosis, these drugs not only act as antioxidants, but also as lipid modulators, inhibitors of inflammation, and inhibitors of gene expression. It is also important to understand the basis for considering vascular cell adhesion mol.-1 (VCAM-1) as a reduction-oxidation-sensitive protein, which has a key role in the early phases of atherosclerosis. The review concludes with a description of the design and chemical of AtheroGenics' lead clin. development compound, AGI-1067, and an anal. of its preclin. in vitro and in vivo profile. AGI-1067 is a novel, potent antioxidant with anti-inflammatory properties. It inhibits gene expression of VCAM-1 and monocyte chemoattractant protein-1, decreases low-d. lipoprotein cholesterol levels, and prevents atherosclerosis in a number of animal models. AGI-1067 is currently undergoing clin. trials as an antiatherosclerotic agent.

IT **216167-82-7**, AGI-1067

RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(chemical and pharmacol. of vascular protectant AGI-1067 for treatment of atherosclerosis and coronary artery disease)

RN 216167-82-7 CAPLUS

CN Butanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)

$$t-Bu$$
 $S-C-S$
 0
 $C-CH_2-CH_2-CO_2H$
 $t-Bu$

RE.CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 14 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2003:65489 CAPLUS

DN 139:240268

TI Effects of AGI-1067 and probucol after percutaneous coronary interventions

AU Tardif, Jean-Claude; Gregoire, Jean; Schwartz, Leonard; Title, Lawrence; Laramee, Louise; Reeves, Francois; Lesperance, Jacques; Bourassa, Martial G.; L'Allier, Philippe L.; Glass, Mitchell; Lambert, Jean; Guertin, Marie-Claude

CS Montreal Heart Institute (J.C.T., J.G., J. Lesperance, M.G.B., P.L.L., J. Lambert, M.-C.G.), Montreal, Montreal, Can.

SO Circulation (2003), 107(4), 552-558 CODEN: CIRCAZ; ISSN: 0009-7322

PB Lippincott Williams & Wilkins

DT Journal

LA English

AGI-1067, a metabolically stable modification of probucol, is an equipotent antioxidant to probucol but is pharmacol. distinct. In a multicenter trial, we studied whether AGI-1067 reduces restenosis assessed by intravascular ultrasound (IVUS) after percutaneous coronary intervention (PCI) compared with placebo and probucol used as a pos. control. Two weeks before PCI, 305 patients were randomly assigned to 1 of 5 treatment groups: placebo, probucol 500 mg BID, or AGI-1067 70, 140, or 280 mg once daily. Patients were treated for 2 wk before and 4 wk after PCI. Baseline and 6-mo follow-up IVUS were interpreted by a blinded core laboratory Stents were used in 85% of patients. Luminal area at the PCI site at follow-up was 2.66±1.58 mm2 for placebo, 3.69±2.69 mm2 for probucol, 2.75±1.76 mm2 for AGI-1067 70 mg, 3.17±2.26 mm2 for AGI-1067 140 mg, and 3.36±2.12 mm2 for AGI-1067 280 mg (P=0.02 for the

dose-response relationship; P0.05 for AGI-1067 280 mg and probucol vs. placebo). There was a mean narrowing of 5.3 mm3 of reference segment lumen in the placebo group and an enlargement in the AGI-1067 140- and 280-mg groups at follow-up (P=0.05 for 140 mg). An increase in QTc interval >60 ms occurred in 4.8% of placebo patients, 17.4% of probucol patients, and 4.8%, 2.4%, and 2.5% of patients in the AGI-1067 groups (P=0.02). AGI-1067 and probucol reduce restenosis after PCI. In contrast to probucol, AGI-1067 did not cause prolongation of the QTc interval and improved lumen dimensions of reference segments, suggestive of a direct effect on atherosclerosis.

IT **216167-82-7**, AGI-1067

RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (effects of AGI-1067 vs. probucol after percutaneous coronary interventions)

RN 216167-82-7 CAPLUS

CN Butanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)

$$t-Bu$$
 $S-C-S$
 O
 O
 $C-CH_2-CH_2-CO_2H$
 $t-Bu$

RE.CNT 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 15 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:871239 CAPLUS

DN 139:16870

TI Prevention of restenosis with antioxidants: Mechanisms and implications

AU Tardif, Jean-Claude; Gregoire, Jean; L'Allier, Philippe L.

CS Department of Medicine, Montreal Heart Institute, Montreal, Can.

SO American Journal of Cardiovascular Drugs (2002), 2(5), 323-334 CODEN: AJCDDJ; ISSN: 1175-3277

PB Adis International Ltd.

DT Journal; General Review

LA English

AB A review giving an overview of the field of restenosis prevention with antioxidants, put in the perspective of their potential use for the prevention of atherosclerosis progression. Compelling evidence points to oxidative stress as an important trigger in the complex chain of events leading to atherosclerosis. There is also evidence that oxidative stress occurs early after angioplasty. Reactive oxygen species (ROS) can induce endothelial dysfunction and macrophage activation, resulting in the release of cytokines and growth factors that stimulate matrix remodeling and smooth muscle cell proliferation. The accumulation of new extracellular matrix and smooth muscle cells will result in the neointimal formation responsible for lumen narrowing after stent deployment and which contributes to that after balloon angioplasty. In addition, oxidation processes

are involved in the crosslinking of collagen fibers, and this coupled with smooth muscle cell contraction and endothelial dysfunction may result in long-term vascular constriction or lack of adaptive vascular remodeling after balloon angioplasty. The powerful antioxidant probucol has been shown to prevent coronary restenosis after balloon angioplasty in the Multivitamins and Probucol (MVP) trial and other clin. studies. However, prolongation of the QT interval with probucol remains a long-term safety

concern. AGI-1067, a metabolically stable analog of probucol, is a vascular protectant with strong antioxidant properties as potent to those of probucol. There has been no evidence of prolongation of the QT interval with AGI-1067 in initial clin. studies. The anti-restenosis properties of AGI-1067 are being assessed in the Canadian Antioxidant Restenosis Trial (CART)-1. Considering that oxidative stress and inflammation may persist for a prolonged period after stent placement, treatment with AGI-1067 for the entire period of risk after percutaneous coronary intervention (PCI) [instead of only 4 wk in CART-1] may result in enhanced protection against luminal re-narrowing. This hypothesis will be tested in the randomized, multicenter CART-2 trial. AGI-1067 has been effective at preventing atherosclerosis in all tested animal models, including the low d. lipoprotein receptor-deficient and apo-E knockout mice. As the ultimate goal of therapy for patients with coronary artery disease must remain prevention of disease progression and atherosclerosis-related events, CART-2 will test the value of AGI-1067 for the reduction of both post-PCI restenosis and atherosclerosis progression.

216167-82-7; AGI-1067 IT

> RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(mechanisms of prevention of restenosis with antioxidants and implications for therapy of coronary artery disease and atherosclerosis)

216167-82-7 CAPLUS RN

Butanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-CNhydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)

$$t-Bu$$
 $S-C-S$
 Me
 $O-C-CH_2-CH_2-CO_2H$
 $t-Bu$

THERE ARE 103 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT 103 ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 16 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN L24

2002:849415 CAPLUS AN

DN137:333157

Probucol monoesters for increasing levels and improving functionality of TIplasma HDL cholesterol

Luchoomun, Jayraz; Saxena, Uday; Sundell, Cynthia L.; Sikorski, James A. IN

Atherogenics, Inc., USA PA

PCT Int. Appl., 161 pp. SO

CODEN: PIXXD2

DTPatent

English ĻΑ

FAN.	CNT	1										•					•		
	PAT	rent	NO.			KIN	D	DATE			APPL	ICAT:	ION I	. 00		D	ATE		
ΡI		2002				A2		2002		1	WO 2	002-1	US12	578		2	00204	111	
	WO	2002	0875	56		A3		2003	0206										
	WO	2002	0875	56		C2		2003	0320										
		W :	AE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,	
			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DΖ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	
			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	LK,	LR,	
			LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,	
			PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	TJ,	TM,	TN,	TR,	TT,	TZ,	
			UA,	UG,	US,	UZ,	VN,	YU,	ZA,	ZM,	ZW,	AM,	AZ,	BY,	KG,	KZ,	MD,	RU,	

TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG US 2003064967 A1 20030403 US 2002-122516 20020411 EP 1385501 A2 20040204 EP 2002-749523 20020411 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

PRAI US 2001-283376P P 20010411 US 2001-345025P P 20011109 WO 2002-US12678 W 20020411

OS MARPAT 137:333157

It has been discovered that certain selected probucol monoesters, and AB their pharmaceutically acceptable salts or prodrugs, are useful for increasing circulating HDL cholesterol. These compds. may also improve HDL functionality by (a) increasing clearance of cholesteryl esters, (b) increasing HDL-particle affinity for hepatic cell surface receptors, or (c) increasing the half-life of apoAI-HDL. The pharmaceutical compns. comprise probucol monoesters alone or in combination with other agents, e.g, statins, IBAT inhibitors, MTP inhibitors, cholesterol absorption inhibitors, phytosterols, CETP inhibitors, fibric acid derivs., and antihypertensive agents. For example, mono[4-[[1-[[3,5-bis(1,1dimethylethyl) -4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1dimethylethyl)phenyl]ester of pentanedioic acid, prepared from probucol and glutaric anhydride, elevated HDLc in hyperlipidemic hamster by 22% (average of 3 expts., range 5-44%), compared to untreated controls after 2 wk treatment at a dose of 150 mg/kg/day. LDLc was reduced by 29% on average, VLDL cholesterol by 42%, and triglycerides by 24%, compared to controls. The compound was well tolerated and all animals gained weight

IT 216167-88-3

CN

CN

RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of probucol monoesters for increasing levels and improving functionality of plasma HDL cholesterol)

RN 216167-88-3 CAPLUS

Butanoic acid, 4-hydroxy-, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenylester (9CI) (CA INDEX NAME)

$$t-Bu$$
 $S-C-S$
 Me
 $t-Bu$
 $Bu-t$
 $O-C-(CH2)3-OH$

IT 216167-80-5P 216167-82-7P 216167-94-1P 474236-49-2P 474236-50-5P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of probucol monoesters for increasing levels and improving functionality of plasma HDL cholesterol)

RN 216167-80-5 CAPLUS

Pentanedioic acid, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl methyl ester (9CI) (CA INDEX NAME)

RN 216167-82-7 CAPLUS

CN Butanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)

RN 216167-94-1 CAPLUS

Pentanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl]ester (9CI) (CA INDEX NAME)

$$t-Bu$$
 $S-C-S$
 O
 O
 C
 $CH_2)_3-CO_2H$
 $t-Bu$

RN 474236-49-2 CAPLUS

CN Butanoic acid, 4-(sulfooxy)-, 1-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester, monosodium salt (9CI) (CA INDEX NAME)

$$t-Bu$$
 $S-C-S$
 Me
 $O-C-(CH2)3-OSO3H
 $t-Bu$$

Na

RN 474236-50-5 CAPLUS

CN Acetic acid, [2-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]-2-oxoethoxy]- (9CI) (CA INDEX NAME)

L24 ANSWER 17 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:814837 CAPLUS

DN 137:320305

TI Probucol derivatives and methods for treating transplant rejection

IN Edwards, David B.; Somers, Patricia K.; Glass, Mitchell

PA Atherogenics, Onc., USA

SO U.S. Pat. Appl. Publ., 22 pp., Cont.-in-part of U.S. Ser. No. 815,262. CODEN: USXXCO

DT Patent

LA English

FAN.CNT 4

IT

	PATENT NO.		DATE	APPLICATION NO.	DATE		
ΡI	US 2002156022		20021024	US 2001-36307	20011025		
	US 6670398	B2	20031230				
	US 6147250	A	20001114	US 1998-79213	19980514		
	US 6548699	B1	20030415	US 1999-370046	19990806		
	US 2002016300	Al	20020207	US 2001-815262	20010321		
	US 2002177717	A1	20021128	US 2002-60734	20020130		
	US 6617352	B2	20030909				
	US 2002169215	A1	20021114	US 2002-114346	20020402		
	US 6602914	B2	20030805				
	US 2002188118	A1	20021212	US 2002-115206	20020402		
	US 2002193446	A1	20021219	US 2002-114351	20020402		
	US 2004138147	A1	20040715	US 2003-744763	20031223		
PRAI	US 1997-47020P	P	19970514				
•	US 1998-79213	A1	19980514				
	US 1999-370046	A2	19990806				
	US 2000-191046P	P	20000321				
	US 2001-815262	A2	20010321				
	US 2001-36307	A1	20011025				
OS GI	MARPAT 137:320305				. ,		

$$R^{1}$$
 S
 S
 R^{3}
 OYZ
 R^{4}

The invention discloses the use of I [R1-R4 = H, OH, C1-10 alkyl, aryl, heteroaryl, etc.; Y = bond, C(O); Z = C1-10 alkyl, C2-10 alkenyl, C2-10 alkynyl, etc.], and pharmaceutically acceptable salts thereof, alone or in combination, for the treatment of transplant rejection. Preparation of I [R1-R4 = tert-butyl; YZ = (CH2)3COOH] from probucol which was evaluated in a graft arteriopathy model and Me 4-chlorobutyrate is described.

216167-95-2P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

I

(probucol derivs. for treatment of transplant rejection)

RN 216167-95-2 CAPLUS

CN Butanoic acid, 4-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]- (9CI) (CA INDEX NAME)

IT 216167-82-7 216167-92-9 216167-94-1

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(probucol derivs. for treatment of transplant rejection)

RN 216167-82-7 CAPLUS

CN Butanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)

$$t-Bu$$
 $S-C-S$
 O
 $O-C-CH_2-CH_2-CO_2H$
 $t-Bu$

RN 216167-92-9 CAPLUS

CN Acetic acid, [4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]- (9CI) (CA INDEX NAME)

$$t-Bu$$
 $S-C-S$
 Me
 $O-CH_2-CO_2H$
 $t-Bu$

RN 216167-94-1 CAPLUS

CN Pentanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl]ester (9CI) (CA INDEX NAME)

$$t-Bu$$
 $S-C-S$
 O
 O
 C
 $CH_2)_3-CO_2H$
 $t-Bu$

L24 ANSWER 18 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:641096 CAPLUS

DN 138:313884

TI Novel phenolic antioxidants as multifunctional inhibitors of inducible VCAM-1 expression for use in atherosclerosis

Meng, Charles Q.; Somers, Patricia K.; Rachita, Carolyn L.; Holt, Lisa A.; Hoong, Lee K.; Zheng, X. Sharon; Simpson, Jacob E.; Hill, Russell R.; Olliff, Lynda K.; Kunsch, Charles; Sundell, Cynthia L.; Parthasarathy, Sampath; Saxena, Uday; Sikorski, James A.; Wasserman, Martin A.

CS AtheroGenics, Inc., Alpharetta, GA, 30004, USA

SO Bioorganic & Medicinal Chemistry Letters (2002), 12(18), 2545-2548 CODEN: BMCLE8; ISSN: 0960-894X

PB Elsevier Science Ltd.

DT Journal

LA English

AB A series of novel phenolic compds. has been discovered as potent inhibitors of TNF- α -inducible expression of vascular cell adhesion mol.-1 (VCAM-1) with concurrent antioxidant and lipid-modulating properties. Optimization of these multifunctional agents led to the identification of AGI-1067 as a clin. candidate with demonstrated efficacies in animal models of atherosclerosis and hyperlipidemia.

IT 216167-82-7, AGI-1067 216167-88-3 216167-94-1

216168-38-6 216168-43-3 219773-27-0

474236-50-5 512790-96-4 512790-97-5

512790-98-6 512790-99-7 512791-00-3

512791-01-4 512791-03-6 512791-04-7

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(phenolic antioxidants as inhibitors of inducible VCAM-1 expression for use in atherosclerosis)

RN 216167-82-7 CAPLUS

CN Butanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)

$$t-Bu$$
 $S-C-S$
 Me
 $O-C-CH_2-CH_2-CO_2H$
 $t-Bu$

RN 216167-88-3 CAPLUS

CN Butanoic acid, 4-hydroxy-, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl ester (9CI) (CA INDEX NAME)

$$t-Bu$$
 $S-C-S$
 Me
 $S-C-S$
 O
 O
 C
 $CH_2)_3-OH$
 $t-Bu$

RN 216167-94-1 CAPLUS

CN Pentanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl]

$$t-Bu$$
 $S-C-S$
 O
 O
 C
 $CH_2)_3-CO_2H$
 $t-Bu$

RN 216168-38-6 CAPLUS

CN Butanoic acid, 4-hydroxy-3,3-dimethyl-, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl ester (9CI) (CA INDEX NAME)

RN 216168-43-3 CAPLUS

CN Butanedioic acid, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl methyl ester (9CI) (CA INDEX NAME)

$$t-Bu$$
 $S-C-S$
 O
 O
 $C-CH_2-CH_2-C-OMe$
 $t-Bu$

RN 219773-27-0 CAPLUS

CN Octanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)

$$t-Bu$$
 $S-C-S$
 O
 O
 C
 $CH_2)$
 $6-CO_2H$
 CH_2

RN 474236-50-5 CAPLUS

CN Acetic acid, [2-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]-2-oxoethoxy]- (9CI) (CA INDEX NAME)

$$t-Bu$$
 $S-C-S$
 0
 $C-C-CH_2-CO_2H$
 $t-Bu$
 $t-Bu$

RN 512790-96-4 CAPLUS

CN Ethanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)

$$t-Bu$$
 $S-C-S$
 Me
 $t-Bu$
 $Bu-t$
 $O-C-CO_2H$
 $t-Bu$

RN 512790-97-5 CAPLUS

CN D-Aspartic acid, N-(phenylacetyl)-, 4-[4-[[1-[[3,5-bis(1,1-dimethylethyl)4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 512790-98-6 CAPLUS

CN 2-Butenedioic acid, 2-(acetyloxy)-, 4-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)

RN 512790-99-7 CAPLUS

Pentanedioic acid, 2-hydroxy-, 1-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl]ester, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$t-Bu$$
 $t-Bu$
 $t-Bu$

RN 512791-00-3 CAPLUS

Pentanedioic acid, hexafluoro-, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)

RN 512791-01-4 CAPLUS

CN Acetic acid, hydroxy-, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl ester (9CI) (CA INDEX NAME)

$$t-Bu$$
 $S-C-S$
 Me
 $O-C-CH_2-OH$
 $t-Bu$

RN 512791-03-6 CAPLUS

Pentanoic acid, 5-hydroxy-, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl ester (9CI) (CA INDEX NAME)

$$t-Bu$$
 $S-C-S$
 O
 O
 C
 $CH_2)_4-OH$
 $t-Bu$

RN 512791-04-7 CAPLUS

CN Butanoic acid, 3,4-dihydroxy-, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl ester (9CI) (CA INDEX NAME)

RE.CNT 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 19 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:580040 CAPLUS

DN 138:130391

TI AGI-1067 AtheroGenics

AU Hatch, Grant M.

CS Department of Pharmacology and Therapeutics Faculty of Medicine, University of Manitoba, Winnipeg, MB, R3E 0T6, Can.

SO Current Opinion in Investigational Drugs (PharmaPress Ltd.) (2002), 3(3), 433-436

CODEN: COIDAZ; ISSN: 1472-4472

PB PharmaPress Ltd.

DT Journal; General Review

LA English

A review. AGI-1067 is an oral VCAM-1 (vascular cell adhesion mol.-1) gene ABexpression inhibitor under development by AtheroGenics for the potential prevention of atherosclerosis (hypercholesterolemia) and restenosis. AGI-1067 was also being developed in collaboration with Schering-Plough; however, in Oct. 2001, all rights to the drug were returned to AtheroGenics. In Feb. 2001, dosing was completed in phase II trials for the potential treatment and prevention of restenosis and atherosclerosis following angioplasty. In Dec. 2001, further phase II trials (CART-2) were initiated for the treatment of restenosis and atherosclerosis. Early-phase clin. trials are ongoing for the prevention of In Jan. 2002, analysts at Adams, Harkness & Hill atherosclerosis. predicted that AGI-1067 would be launched in the second half of 2005, with sales of US \$100 m in that year and US \$540 m in 2006. It was also believed that AtheroGenics would look to sign a marketing partnership following the expected completion of the CART-2 trial in 2002.

IT **216167-82-7**, AGI 1067

RL: ADV (Adverse effect, including toxicity); DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(AGI-1067 pharmacol. and clin. development)

RN 216167-82-7 CAPLUS

CN Butanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 20 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2001:863541 CAPLUS

DN 135:371524

TI Process for preparing water-soluble probucol acyl esters for use as food antioxidants

IN Jass, Paul Alan

PA Salsbury Chemicals, Inc., USA

SO U.S., 5 pp.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
ΡI	US 6323359	B1	20011127	US 2000-562657	20000502		
PRAI	US 2000-562657		20000502				
os	CASREACT 135:371524;	MARPA'	Г 135:371524				
GI							

Ι

$$\begin{array}{c}
R^{3} \\
X-O \longrightarrow S-C-S \longrightarrow O-Y \\
R^{4} \longrightarrow R^{6}
\end{array}$$

Water-soluble derivs. of probucol compds. [I; R1, R2 = alkyl, alkenyl, aryl; R3-R6 = C1-4 alkyl; X, Y = H, (un)saturated (un)substituted C1-8 acyl] (e.g., probucol mono- and disuccinate), useful as food antioxidants, are prepared by the reaction of a solution of a probucol compound (II) with an alkali metal hydroxide, alkali metal alkoxide (e.g., potassium tert-butoxide), alkylammonium alkoxide, alkylammonium hydroxide and mixts. forming an ammonium or an alkali metal salt of the probucol compound and reacting the salt with a carboxylic acid anhydride selected from succinic anhydride, glutaric anhydride, adipic anhydride, suberic anhydride, sebacic anhydride, azelaic anhydride, phthalic anhydride, and maleic anhydride.

IT 216167-82-7P

RL: FFD (Food or feed use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(process for preparing water-soluble probucol acyl esters for use as food antioxidants)

RN 216167-82-7 CAPLUS

CN Butanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)

$$t-Bu$$
 $S-C-S$
 Me
 $O-C-CH_2-CH_2-CO_2H$
 $t-Bu$
 $t-Bu$

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 21 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2000:335659 CAPLUS

DN 132:343330

TI Methods and compositions to lower plasma cholesterol levels

IN Medford, Russell M.; Saxena, Uday

PA Atherogenics, Inc., USA

SO PCT Int. Appl., 50 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.				KIND DATE			APPLICATION NO.						DATE				
ΡI	WO 2000028332		A1 20000518		Ţ	WO 1:	999-1	US26	19991109									
		W :	AE,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CR,	CU,
			CZ,	DE,	DK,	DM,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,	ID,	IL,
`			IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MA,
			MD,	MG,	MK,	MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,
			SK,	SL,	TJ,	TM,	TR,	TT,	UA,	UG,	US,	UZ,	VN,	YU,	ZA,	ZW,	AM,	AZ,
			BY,	KG,	KZ,	MD,	RU,	ТJ,	TM									
		RW:	GH,	GM,	KE,	LS,	MW,	SD,	SL,	SZ,	TZ,	UG,	ZW,	AT,	BE,	CH,	CY,	DE,
			DK,	ES,	FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,
			CG,	CI,	CM,	GA,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG				
	EP	1137	948			A1 20011004			EP 1999-962732						19991109			
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
			IE,	SI,	LT,	LV,	FI,	RO							•			
	JP 2002529740 T2				20020910 JP 2000-581459						19991109							
PRAI						P 19981109												
	WO 1999-US26519 W				1999	1109												

AB A method for determining whether a compound binds to a lipoprotein, e.g. LDL or VLDL, in a manner which will lower plasma cholesterol is provided that includes assessing the ability of the compound to form a complex with the lipoprotein, e.g., LDL or VLDL, and then determining whether the newly formed complex causes a change in the structure of apoB-100 that results in increased binding affinity to the LDL receptor. Also disclosed is a method for lowering cholesterol in a host in need thereof, including a human, that includes the administration of an effective amount of a compound which binds to cholesterol-carrying lipoprotein (e.g. LDL or VLDL) in a manner that alters the three dimensional configuration of the lipoprotein and increases the binding affinity of the apoB-100 protein to the LDL receptor, including those on the surface of a hepatic cell.

IT 216167-82-7 216167-94-1 216167-95-2

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(methods and compns. to lower plasma cholesterol levels)

RN 216167-82-7 CAPLUS

CN Butanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)

$$t-Bu$$
 HO
 $S-C-S$
 O
 O
 $C-CH_2-CH_2-CO_2H$
 $t-Bu$

RN 216167-94-1 CAPLUS

Pentanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl]ester (9CI) (CA INDEX NAME)

RN 216167-95-2 CAPLUS

CN Butanoic acid, 4-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]- (9CI) (CA INDEX NAME)

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 22 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1999:48609 CAPLUS

DN 130:119591

TI Antioxidant enhancement of therapy for hyperproliferative conditions

IN Chinery, Rebecca; Beauchamp, R. Daniel; Coffey, Robert J.; Medford,
 Russell M.; Wadsinski, Brian

PA Atherogenics, Inc., USA

SO PCT Int. Appl., 112 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
ΡI	WO 9901118	A2	19990114	WO 1998-US13750	19980701		
	WO 9901118	A3	. 19990422				

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W: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GE, HU, ID, IL, IS,
             JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO,
             SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, YU, AM, AZ, BY, KG, KZ,
             MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
             FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
             CM, GA, GN, ML, MR, NE, SN, TD, TG
                                19990125
                                                                    19980701
     AU 9882827
                                            AU 1998-82827
                          A1
                                20000719
                                                                    19980701
                          A2
                                            EP 1998-933078
     EP 1019034
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
                                                                    19980701
                          T2
                                20020416
                                            JP 1999-507360
     JP 2002511878
                                                                    20010207
                          A1
                                20011206
                                            US 2001-779086
     US 2001049349
                          A
                                19970701
PRAI US 1997-886653
                          Α
                                19971111
     US 1997-967492
                          B1
                                19980701
     US 1998-108609
                                19980701
     WO 1998-US13750
                          W
     MARPAT 130:119591
OS
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AB A method to enhance the cytotoxic activity of an antineoplastic drug comprises administering an effective amount of the antineoplastic drug to a host exhibiting abnormal cell proliferation in combination with an effective cytotoxicity-increasing amount of an antioxidant. The invention also includes a method to decrease the toxicity to an antineoplastic agent or increase the therapeutic index of an antineoplastic agent administered for the treatment of a solid growth of abnormally proliferating cells, comprising administering an antioxidant prior to, with, or following the antineoplastic treatment.

IT 216167-82-7 216167-94-1 219773-26-9 219773-27-0 219773-28-1 219773-29-2 219773-30-5

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(antioxidant enhancement of therapy for hyperproliferative conditions) 216167-82-7 CAPLUS

RN 216167-82-7 CAPLUS

CN Butanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl]

ester (9CI) (CA INDEX NAME)

$$t-Bu$$
 $S-C-S$
 Me
 $O-C-CH_2-CH_2-CO_2H$
 $t-Bu$
 $t-Bu$

RN 216167-94-1 CAPLUS

CN Pentanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl]ester (9CI) (CA INDEX NAME)

$$t-Bu$$
 $S-C-S$
 0
 $C-C-C$
 $t-Bu$
 $t-Bu$
 $t-Bu$
 $t-Bu$
 $t-Bu$
 $t-Bu$
 $t-Bu$
 $t-Bu$
 $t-Bu$

RN 219773-26-9 CAPLUS

CN Hexanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)

$$t-Bu$$
 $S-C-S$
 Me
 $O-C-(CH2)4-CO2H
 $t-Bu$$

RN 219773-27-0 CAPLUS

CN Octanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)

$$t-Bu$$
 $S-C-S$
 O
 O
 C
 $CH_2)_6-CO_2H$
 $t-Bu$

RN 219773-28-1 CAPLUS

CN Decanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)

$$t-Bu$$
 $S-C-S$
 Me
 $O-C-(CH2)8-CO2H
 $t-Bu$$

RN 219773-29-2 CAPLUS

Nonanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl]
ester (9CI) (CA INDEX NAME)

$$t-Bu$$
 $S-C-S$
 O
 O
 $C-C$
 $CH_2)$ $7-CO_2H$
 $t-Bu$

RN 219773-30-5 CAPLUS

CN 2-Butenedioic acid (2Z)-, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.

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COPYRIGHT 2004 ACS on STN
                      CAPLUS
L24
     ANSWER 23 OF 24
     1998:761875 CAPLUS
AN
DN
     130:13646
     Preparation of phenolic compounds for the inhibition of the expression of
TI
     VCAM-1
     Medford, Russell M.; Somers, Patricia K.; Hoong, Lee K.; Meng, Charles Q.
IN
     Atherogenics, Inc., USA
PA
     PCT Int. Appl., 109 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 4
                                                                     DATE
                                             APPLICATION NO.
     PATENT NO.
                          KIND
                                 DATE
                                                                     19980514
                                 19981119
                                             WO 1998-US9781
PI
     WO 9851662
                          A2
     WO 9851662
                          A3
                                 20000302
            AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
             DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG,
             KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX,
             NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,
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			UA,	ŪĠ,	US,	UZ,	VN,	YU,	ZW,	AM,	AZ	, BY,	KG,	ΚZ,	MD,	RU,	TJ,	MT
		RW:	AT,	BE,	CH,	CY,	DE,	DK,	ES,	FI,	FR	, GB,	GR,	IE,	IT,	LU,	MC,	NL,
			PT,	SE,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA	, GN,	ML,	MR,	NE,	SN,	TD,	TG
	CA	2428130				AA		1998	1119	(CA :	1998-2	2428	130		1	9980	514
AU 9874851					A1 19981208				AU 1998-74851						19980514			
	AU 750041 TR 9902802 EP 994853				B2	B2 20020711												
					T 2	T2 20000421 TR 1999-99028						802	19980514					
				A2	2 20000426				EP 1998-922264						19980514			
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			IE,	SI,	LT,	LV,	FI,	RO					′					
	TR	9902	803			T2		2000	0721	,	TR	1999-	9902	803		1	9980	514
	US	6121	319			Α		2000	0919	1	US	1998-	7893	5		1:	9980	514
	BR 9809819 JP 2002503227			A	A 20010918				BR 1998-9819						19980514			
					T2		2002	0129	ı	JP	1998-	5495	02		1	9980	514	
	NO	9905	544			Α		2000	0110]	NO :	1999-	5544			1	9991	112
	MX	9910	402			A		2000	0630]	MX	1999-	1040	2		1	9991	112
	ИО	2003002254				A		2000	0110]	NO :	2003-	2254			2	0030	519
PRAI	US	1997	-470	20P		P		1997	0514									
	WO	O 1998-US9781			W		19980514											

OS MARPAT 130:13646

GΙ

$$R^3$$
 R
 R^4
 R^2
 R^4

Title compds. [e.g., I; R = Z1Z2R5; R1,R2 = (un)substituted (cyclo)alkyl, -(hetero)aryl, etc.; R3,R4 = any group that does not otherwise adversely affect (sic) the desired properties of the mol. including H, halogen, or R1 (sic); R5 = (di)(alkyl)amino, alkyl, alkoxy(carbonyl), (hetero)aryl, etc.; Z1 = O SOO-2, NH, CH2; Z2 = bond, alkylene(oxy) aryleneoxy, etc.] were prepared Thus, 4-(BrCH2)C6H4CH2CO2H was thioetherified by 4-mercapto-2,6-di-tert-butylphenol to give I [R = SCH2C6H4(CH2CO2H)-4, R1 = R2 = CMe3, R3 = R4 = H]. Data for biol. activity of I were given.

1T 216167-80-5P 216167-82-7P 216167-88-3P 216167-92-9P 216167-94-1P 216167-95-2P 216168-18-2P 216168-37-5P 216168-38-6P 216168-39-7P 216168-41-1P 216168-43-3P 216168-44-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of phenolic compds. for the inhibition of the expression of

RN 216167-80-5 CAPLUS

VCAM-1)

CN Pentanedioic acid, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl methyl ester (9CI) (CA INDEX NAME)

RN 216167-82-7 CAPLUS

CN Butanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)

$$t-Bu$$
 $S-C-S$
 O
 O
 $C-CH_2-CH_2-CO_2H$
 $t-Bu$

RN 216167-88-3 CAPLUS

CN Butanoic acid, 4-hydroxy-, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl ester (9CI) (CA INDEX NAME)

RN 216167-92-9 CAPLUS

CN Acetic acid, [4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]- (9CI) (CA INDEX NAME)

$$t-Bu$$
 $S-C-S$
 Me
 $t-Bu$
 $Bu-t$
 $O-CH_2-CO_2H$
 $t-Bu$

RN 216167-94-1 CAPLUS

CN Pentanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)

RN 216167-95-2 CAPLUS

CN Butanoic acid, 4-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]- (9CI) (CA INDEX NAME)

$$t-Bu$$
 $S-C-S$
 Me
 $O-(CH_2)_3-CO_2H$
 $t-Bu$

RN 216168-18-2 CAPLUS

CN L-Arginine, N2-[4-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]-1,4-dioxobutyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$t-Bu$$
 $t-Bu$
 $t-Bu$

PAGE 1-B

 $_{NH_2}$

RN 216168-37-5 CAPLUS

CN Butanoic acid, 4-[[hydroxy(2-hydroxyphenoxy)phosphinyl]oxy]-,
4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl ester (9CI) (CA INDEX NAME)

OH OH
$$CH_2$$
) 3 C CH_2) 3 C CH_3 C CH_4 CH_4 CH_5 CH_5 CH_5 CH_5 CH_5 CH_6 CH_6 CH_6 CH_7 CH_8 CH_8

RN 216168-38-6 CAPLUS

CN Butanoic acid, 4-hydroxy-3,3-dimethyl-, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl ester (9CI) (CA INDEX NAME)

$$t-Bu$$
 $S-C-S$
 O
 Me
 $O-C-CH_2-C-CH_2-OH$
 $t-Bu$
 Me
 Me
 Me
 Me

RN 216168-39-7 CAPLUS

CN Butanoic acid, 4-(sulfooxy)-, 1-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)

RN 216168-41-1 CAPLUS

CN Butanoic acid, 4-amino-4-oxo-, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl ester (9CI) (CA INDEX NAME)

RN 216168-43-3 CAPLUS

CN Butanedioic acid, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl methyl ester (9CI) (CA INDEX NAME)

$$t-Bu$$
 $S-C-S$
 Me
 $O-C-CH_2-CH_2-C-OMe$
 $t-Bu$

RN 216168-44-4 CAPLUS

CN Pentanoic acid, 5-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy](9CI) (CA INDEX NAME)

$$t-Bu$$
 $S-C-S$
 Me
 $O-(CH2)4-CO2H$
 $t-Bu$

IT 216168-63-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of phenolic compds. for the inhibition of the expression of VCAM-1)

RN 216168-63-7 CAPLUS

CN Butanedioic acid, 2,2-dimethyl-, 4-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)

$$t-Bu$$
 $S-C-S$
 0
 Me
 $O-C-CH_2-C-CO_2H$
 $t-Bu$
 $t-Bu$
 Me
 $t-Bu$
 Me

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L24
     ANSWER 24 OF 24 CAPLUS
                               COPYRIGHT 2004 ACS on STN
AN
     1998:761806 CAPLUS
DN
     130:20572
     Monoesters of probucol for the treatment of cardiovascular and
TI
     inflammatory disease
     Medford, Russell M.; Somers, Patricia K.
IN
PA
     Atherogenics, Inc., USA
     PCT Int. Appl., 36 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 4
     PATENT NO.
                          KIND
                                 DATE
                                             APPLICATION NO.
                                                                     DATE
                          A2
PI
     WO 9851289
                                 19981119
                                             WO 1998-US9773
                                                                     19980514
     WO 9851289
                          A3
                                 19990514
         W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
             DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG,
             KP, KR, KZ, LC, LK, LR, LS, LT, LV, MD, MG, MK, MN, MW, MX, NO,
             NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA,
             UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
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                                             NZ 1997-501069
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                                             NO 1999-5543
                                                                     19991112
                          Α
     MX 9910404
                                             MX 1999-10404
                          Α
                                 20000630
                                                                     19991112
PRÀI US 1997-47020P
                          P
                                 19970514
     WO 1998-US9773
                                 19980514
                          W
     This invention is a method and composition for the inhibition of VCAM-1, and in
AB
     particular for the treatment of cardiovascular or inflammatory disease,
     including atherosclerosis, that includes the administration of an
     effective amount of an ester of probucol. Rabbits were fed high fat chow-
     (0.5% cholesterol and 3% coconut oil) containing 0.5% probucol monosuccinate
     (I) for 3wk. I caused a significant reduction in all lipoprotein fractions.
     216167-82-7
IT
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (monoesters of probucol for treatment of cardiovascular and
        inflammatory disease)
     216167-82-7 CAPLUS
RN
     Butanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-
CN
```

hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl]

ester (9CI) (CA INDEX NAME)

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